



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/840,174	05/05/2004	Hannu Moilanen	5054-8PCON	7490	
27799 75	590 11/20/2006		EXAM	EXAMINER	
	TANI, LIEBERMAN &	TRAN, H	TRAN, HENRY N		
551 FIFTH AV SUITE 1210	ENUE		ART UNIT	PAPER NUMBER	
NEW YORK, NY 10176			2629		
			DATE MAILED: 11/20/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

		r							
Office Action Summan		Application No. Applicant(s)							
		10/840,17	4	MOILANEN ET AL.					
Office Action Summary			Examiner		Art Unit				
			Henry N. T		2629				
 Period for	The MAILING DATE of this communic Reply	cation appe	ears on the	cover sheet with the c	orrespondence ad	ldress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)⊠ R	esponsive to communication(s) filed	l on <i>05 Ma</i>	av 2004						
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
<i>'</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
·									
• —	Claim(s) <u>1-16</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	5) Claim(s) is/are allowed.								
·	<ul> <li>Claim(s) 1,2,4-6,8-10,12-14 and 16 is/are rejected.</li> <li>Claim(s) 3,7,11 and 15 is/are abjected to</li> </ul>								
·	7) Claim(s) 3,7,11 and 15 is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.									
<b>Application</b>	n Papers								
9)⊠ Th	e specification is objected to by the	Examiner	r.						
10)⊠ The drawing(s) filed on <u>05 May 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority und	der 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)[	a) ☐ All b) ☐ Some * c) ☒ None of:								
1.	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the International Bureau (PCT Rule 17.2(a)).								
* See	* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  4) ☐ Interview Summary (PTO-413)									
	if References Cited (PTO-892) f Draftsperson's Patent Drawing Review (PT	O-948)		4) Interview Summary Paper No(s)/Mail Da					
3) Notice (PTO/SB/08) 5) Notice					atent Application				
Paper No(s)/Mail Date 6)									

Application/Control Number: 10/840,174

Art Unit: 2629

#### **DETAILED ACTION**

This Application has been examined. The original claims 1-16 are pending. The examination results are as follows.

#### Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

The list of the required certified copies under 35 U.S.C. 371 that have not received is as follows:

- Copy of the International Application filed on 11/11/2002 (PCT/FI02/00889)
- English Translation of the IA filed on 11/11/2002
- Copy of the International Search Report (ISR)
- Copy of IPE Report
- Copy of Annexes to the IPER.

## Specification

- 2. The disclosure is objected to because of the following informalities:
- (a) The title of the invention recited on top of the specification is missing the term "Multi-Functional"
- (b) The cross reference to related application recited in page 2 of the specification must be included in the first sentence(s) of the specification <u>following the title</u> or in an application data sheet, and indicate the status as "now abandoned", see MPEP § 201.11 and 37 CFR 1.77(b).

Appropriate correction is required in response to this Office action.

Application/Control Number: 10/840,174 Page 3

Art Unit: 2629

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 4. Claims 1, 2, 4-6, 8-10, 12-14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosenberg et al (U.S. Patent No. 6,429,846, hereinafter referred to as "Rosenberg").
- 5. Regarding claim 1, Rosenberg, Figure 8, teaches an electronic device (80) for generating user detectable multi-functional feedback with a single component in response to a stimulus signal, the electronic device including a housing (88), a display, and electronic circuitry located in the housing, the improvement comprising: a lens covering the display, the lens having a transparent area placed over the display ("touch screen 82"), force sensors attached to the lens for detecting a touch against the lens, the force sensors producing a stimulus signal in response to the touch ("a transparent sensor film"), at least one resonating vibrating element attached to an

Application/Control Number: 10/840,174 Page 4

Art Unit: 2629

area of said lens extending outside of the display ("one or more actuators 86"), the at least one resonating vibrating element being operable to produce at least two feedback signals (haptic feedback) selected from a group consisting of a haptic feedback signal, a vibratory alert signal, an audio signal, and a buzzer signal; and an electrical drive circuit (a microprocessor" electrically coupled to said at least one resonating vibrating element for electrically driving said at least one resonating vibrating element with a drive signal based on the stimulus signal, see col. 15, line 60 to col. 16, line 52.

- 6. Regarding claims 2, 4-6 and 8, Rosenberg further teaches: the feedback signals comprising at least one of a haptic feedback signal, a vibratory alert signal, see col. 16, lines 17-21; the at least one resonating vibrating element being operable as an acceleration sensor (the actuator 86 produces haptic feedback signals which allow the touch screen 82 to move in the Z-direction), see col. 16, lines 45-52; the at least one resonating vibrating element (86) comprising a piezo-bender of a multilayer structure, see Figure 8B; the electronic device further comprising an external mass attached to said piezo-bender, see col. 16, lines 57-59; and the electronic device being a hand-held electronic device, see Figure 8 ("PDA 80").
- 7. Regarding claims 9, 10, 12-14 and 16, which comprise similar claimed elements and limitations recited in claims 1, 2, 4-6 and 8, and are rejected at least on the same reasons noted above.

## Allowable Subject Matter

8. Claims 3, 7, 11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/840,174 Page 5

Art Unit: 2629

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are U.S. Patents Nos.: 7131073, 7039866, and 5436622, which teach force feedback devices and methods.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry N. Tran whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry N Tran
Primary Examiner W/14/06

Art Unit 2629